

CONSERVATION CROP ROTATION

USDA, NATURAL RESOURCES CONSERVATION SERVICE PA328



PRACTICE DEFINITION

This practice applies to growing various crops in the same field in a planned sequence. This sequence may involve growing high residue producing crops, such as corn grain or wheat in rotation with low residue producing crops such as soybeans or crops where crop residues are harvested such as silage corn. The rotation may also involve growing forage crops in rotation with various field crops.

PRACTICE INFORMATION

The effectiveness of cropping systems varies with the soil type, crops produced, farming operations, and management of the crop residue. The most effective crops for soil improvement are fibrous rooted high residue crops such as grass and small grain. Perennial forage crops are very effective in increasing soil organic matter and decreasing soil erosion. In addition, crop rotations help break insect, disease and weed cycles. Rotations add diversity to farm operations and often reduce economic and environmental risks. Crop rotations are a low cost practice that often are related to other conservation practices such as no-till planting, strip cropping, contour farming, and crop residue management. Practices such as diversions, terraces, and grassed waterways are frequently used with conservation crop rotations.

From time to time due to weather and other conditions, a conservation crop rotation will need to be modified in a given year. A good rule of thumb would be that you could always replace a tilled/low residue crop with a no-till crop of equal or higher residue. Years of hay may be extended, but years of a crop such as silage corn may not be increased without consultation with your local NRCS office. For producers in a continuous no-till system, generally crops may be substituted for one another, especially if fall grains or cover crops are used whenever crop residues are removed. If you have questions on your crop rotation as you are implementing it feel free to contact your local NRCS office.

Generally, in addition to the planned crops to be grown, the tillage and/or planting method will be specified as well as the use of cover crops.

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